What is claimed is:

1. An optical glass comprising, in mass percent:

P_2O_5	15 – 35%
Nb_2O_5	40 – 60%
Na_2O	0.5% to less than 15% and
BaO	3% to less than 25%;

having a ratio in mass % of $(BaO + Nb_2O_5)/\{(TiO_2 + WO_3) \times 3 + Bi_2O_3 + Nb_2O_5\}$ > 1.0; being free of Pb and As; and having a refractive index (nd) within a range from 1.78 to 1.90 and an Abbe number (νd) within a range from 18 to 27.

2. An optical glass as defined in claim 1 further comprising, in mass %:

Gd_2O_3	0 – 5% and/or
K_2O	0 – 10% and/or
Li_2O	0 – 10% and/or
Bi_2O_3	0 – 5% and/or
MgO	0 – 10% and/or
CaO	0 – 10% and/or
SrO	0 – 10% and/or
ZnO	0 – 3% and/or
SiO_2	0 – 5% and/or
B_2O_3	0 – 5% and/or
Al_2O_3	0 – 4% and/or
Ta_2O_5	0 – 5% and/or
ZrO_2	0 – 3% and/or
TiO_2	0 – 5% and/or
WO_3	0 – 8% and/or
Sb_2O_3	0 – 0.02%.

3. An optical glass as defined in claim 1 which, in X – Y rectangular co-ordinates with X-axis representing ISO Color Contribution Index G calculated by using spectral transmittance of a glass material measured by the Japan Optical Glass Industry Standard JOGIS02-1975 (Measuring Method for Degree of Coloring of Optical Glass) and Y-axis representing refractive index (nd), is within an area having a smaller value of ISO Color Contribution Index G and a higher refractive index (nd) than a straight line (SL3 – G) : $Y = 0.0277X + 1.725$ and which, in X – Y rectangular co-ordinates with X-axis representing ISO Color Contribution Index R calculated by using spectral transmittance of a glass bulk measured by the Japan Optical Glass Industry Standard JOGIS02-1975 and Y-axis representing refractive index (nd), is within an area having a smaller value of ISO Color Contribution Index R and a higher refractive index (nd) than a straight line (SL3 – R) : $Y = 0.0273X + 1.7102$.

4. An optical glass as defined in claim 1 wherein the sum of sectional areas of bubbles contained in glass of 100ml shown in Table 1 of the Japan Optical Glass Industry Standard JOGIS12-1994 (Measuring Method for Bubble in Optical Glass) is Class 1 – Class 4 and the sum of sectional areas of inclusion contained in glass of 100ml shown in Table 1 of the Japan Optical Glass Industry Standard JOGIS13-1994 (Measuring Method for Inclusion in Optical Glass) is Class 1 – Class 4.

5. An optical glass as defined in claim 1 which, in X – Y rectangular co-ordinates with X-axis representing ISO Color Contribution Index G calculated by using spectral transmittance of a glass material measured by the Japan Optical Glass Industry Standard JOGIS02-1975 (Measuring Method for Degree of Coloring of Optical Glass) and Y-axis representing refractive

index (nd), is within an area having a smaller value of ISO Color Contribution Index G and a higher refractive index (nd) than a straight line (SL5 – G) : Y = 0.0329X + 1.7174 and which, in X – Y rectangular co-ordinates with X-axis representing ISO Color Contribution Index R calculated by using spectral transmittance of a glass bulk measured by the Japan Optical Glass Industry Standard JOGIS02-1975 and Y-axis representing refractive index (nd), is within an area having a smaller value of ISO Color Contribution Index R and a higher refractive index (nd) than a straight line (SL5 – R) : Y = 0.0288X + 1.713.

6. An optical glass as defined in claim 1 comprising, in mass percent:

P_2O_5	15 – 35%
Nb_2O_5	40 – 60%
Na_2O	0.5% to less than 15% and
BaO	3% to less than 25%;

and further comprising, in mass %:

Gd_2O_3	0 – 4% and/or
K_2O	0 – 6% and/or
Li_2O	0% to less than 6% and/or
Bi_2O_3	0% to less than 5% and/or
MgO	0% to less than 10% and/or
CaO	0% to less than 10% and/or
SrO	0% to less than 10% and/or
ZnO	0 – 3% and/or
SiO_2	0 – 5% and/or
B_2O_3	0 – 5% and/or
Al_2O_3	0 – 4% and/or
Ta_2O_5	0 – 5% and/or
ZrO_2	0 – 3% and/or

Sb_2O_3	0 – 0.02% and/or
TiO_2	0 – 5% and/or
WO_3	0 – 8% and/or

a fluoride or fluorides of a metal element or elements contained in the above metal oxides, a total amount of F contained in the fluoride or fluorides 0 – 5%; and

having a ratio in mass % of $(BaO + Nb_2O_5)/\{(TiO_2 + WO_3) \times 3 + Bi_2O_3 + Nb_2O_5\} > 1.0$.

7. An optical glass as defined in claim 1 comprising, in mass percent:

P_2O_5	15 – 35%
Nb_2O_5	40 – 60%
Na_2O	0.5% to less than 15% and
BaO	3% to less than 25%;

and further comprising, in mass %:

Gd_2O_3	0.1 – 4% and/or
K_2O	0 – 6% and/or
Li_2O	0% to less than 6% and/or
Bi_2O_3	0% to less than4.5% and/or
MgO	0% to less than 10% and/or
CaO	0% to less than 10% and/or
SrO	0% to less than 10% and/or
ZnO	0 – 3% and/or
SiO_2	0% to less than 5% and/or
B_2O_3	0% to less than 5% and/or
Al_2O_3	0 – 4% and/or
Ta_2O_5	0 – 5% and/or
ZrO_2	0 – 3% and/or
Sb_2O_3	0 - 0.01% and/or

TiO_2	0 – 5% and/or
WO_3	0 – 8% and/or

a fluoride or fluorides of a metal element or elements contained in the above metal oxides, a total amount of F contained in the fluoride or fluorides 0 – 5%; and

having a ratio in mass % of $(BaO + Nb_2O_5)/\{(TiO_2 + WO_3) \times 3 + Bi_2O_3 + Nb_2O_5\} > 1.0$.

8. An optical glass as defined in claim 1 which, in X – Y rectangular co-ordinates with X-axis representing ISO Color Contribution Index G calculated by using spectral transmittance of a glass material measured by the Japan Optical Glass Industry Standard JOGIS02-1975 (Measuring Method for Degree of Coloring of Optical Glass) and Y-axis representing refractive index (nd), is within an area having a smaller value of ISO Color Contribution Index G and a higher refractive index (nd) than a straight line (SL8 – G) : $Y = 0.0329X + 1.7245$ and which, in X – Y rectangular co-ordinates with X-axis representing ISO Color Contribution Index R calculated by using spectral transmittance of a glass bulk measured by the Japan Optical Glass Industry Standard JOGIS02-1975 and Y-axis representing refractive index (nd), is within an area having a smaller value of ISO Color Contribution Index R and a higher refractive index (nd) than a straight line (SL8 – R) : $Y = 0.0288X + 1.7208$.

9. An optical glass as defined in claim 1 comprising, in mass percent:

P_2O_5	15 – 30%
Nb_2O_5	42 – 60%
Na_2O	0.5% to less than 10% and
BaO	5% to less than 25%;

and further comprising, in mass %:

Gd_2O_3	0.1 – 4% and/or
K_2O	0 – 6% and/or
Li_2O	0 – 2% and/or
Bi_2O_3	0% to less than4.5% and/or
MgO	0% to less than 10% and/or
CaO	0% to less than 10% and/or
SrO	0% to less than 10% and/or
ZnO	0 – 3% and/or
SiO_2	0.1% to less than 4% and/or
B_2O_3	0.2% to less than 5% and/or
Al_2O_3	0 – 4% and/or
Ta_2O_5	0 – 5% and/or
ZrO_2	0 – 3% and/or
Sb_2O_3	0 – 0.01% and/or
TiO_2	0 – 3% and/or
WO_3	0 – 5% and/or

a fluoride or fluorides of a metal element or elements contained in the above metal oxides, a total amount of F contained in the fluoride or fluorides 0 – 5%; and

having a ratio in mass % of $(BaO + Nb_2O_5)/\{(TiO_2 + WO_3) \times 3 + Bi_2O_3 + Nb_2O_5\} > 1.1$.

10. An optical glass comprising, in mass percent:

P_2O_5	15 – 35%
Nb_2O_5	40 – 60%
Gd_2O_3	0.1 – 4%
Na_2O	0.5% to less than 10%
K_2O	0 – 6%

where the total amount of Na_2O and K_2O is 0.5% to less than 10%

Bi_2O_3	0% to less than 5%
MgO	0% to less than 10%
CaO	0% to less than 10%
SrO	0 to less than 10%
BaO	0.5% to less than 25%
ZnO	0 – 3%
SiO_2	0% to less than 5%
B_2O_3	0.2% to less than 5%
Al_2O_3	0 – 3%
Ta_2O_5	0 – 5%
ZrO_2	0 – 3%
Sb_2O_3	0 – 0.03%

and a fluoride or fluorides of a metal element or elements contained in the above metal oxides, a total amount of F contained in the fluoride or fluorides 0 – 5%;

being free of Pb, WO_3 and TiO_2 and having a refractive index (nd) within a range from 1.78 to 1.90 and an Abbe number (νd) within a range from 18 to 27.

11. An optical glass comprising, in mass percent:

P_2O_5	15 –30%
Nb_2O_5	42 – 60%
Gd_2O_3	0.1 – 4%
Na_2O	0.5 – 9.6%
K_2O	0 – 6%

where the total amount of Na_2O and K_2O is 0.5% to 9.6%

Bi_2O_3	0 – 4.5%
MgO	0% to less than 10%
CaO	0% to less than 10%

SrO	0% to less than 10%
BaO	0.5% to less than 25%
ZnO	0 – 3%
SiO_2	0.1% to less than 4%
B_2O_3	0.2% to less than 5%
Al_2O_3	0 – 3%
Ta_2O_5	0 – 5%
ZrO_2	0 – 3%
Sb_2O_3	0 – 0.03%

and a fluoride or fluorides of a metal element or elements contained in the above metal oxides, a total amount of F contained in the fluoride or fluorides 0 – 5%;

being free of Pb, WO_3 and TiO_2 and having a refractive index (nd) within a range from 1.78 to 1.90 and an Abbe number (νd) within a range from 18 to 27.

12. An optical glass as defined in claim 1 wherein the sum of sectional areas of bubbles contained in glass of 100ml shown in Table 1 of the Japan Optical Glass Industry Standard JOGIS12-1994 (Measuring Method for Bubbles in Optical Glass) is Class 1 – Class 3, the sum of sectional areas of inclusion contained in glass of 100ml shown in Table 1 of Japan Optical Glass Industry Standard JOGIS13-1994 (Measuring Method for Inclusion in Optical Glass) is Class 1 – Class 3, and the degree of striae shown in Table 2 of the Japan Optical Glass Industry Standard JOGIS11-1975 (Measuring Method for Striae in Optical Glass) is Class 1 – Class 3.

13. An optical glass as defined in claim 1 wherein the degree of striae shown in Table 2 of the Japan Optical Glass Industry Standard JOGIS11-1975 (Measuring Method for Striae in Optical Glass) is Class 1 or Class 2, the sum

of sectional areas of bubbles contained in glass of 100ml shown in Table 1 of the Japan Optical Glass Industry Standard JOGIS12-1994 (Measuring Method for Bubble in Optical Glass) is Class 1 or Class 2, and the sum of sectional areas of inclusion contained in glass of 100ml shown in Table 1 of Japan Optical Glass Industry Standard JOGIS13-1994 (Measuring Method for Inclusion in Optical Glass) is Class 1 or Class 2.

14. An optical glass as defined in claim 1 having a refractive index (nd) within a range from 1.80 to 1.85 and an Abbe number (νd) within a range from 23.8 to 25.7.